

Claims

1. A radio communication system, comprising: a base station of a first radio communication system; a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system, and operating asynchronous to the base station of the first radio communication system; and a mobile station capable of communications with both the first and second radio communication systems, wherein

the mobile station includes:

a radio section that receives a radio wave from each of the first and second radio communication systems; and

a system information detection section that detects system information of the second radio communication system, and outputs system detection information,

the base station of the first radio communication system includes

a storage section that stores the system detection information provided by the mobile station, and

a switching is made between separate radio systems by informing the system detection information from the base station of the first radio communication system to the mobile station in the cell for communications by the base station of the first radio communication system.

2. The radio communication system according to claim 1, wherein

the mobile station includes

a position detection section that detects position information of the mobile station,

the base station of the first radio communication system includes

a storage section that stores the system detection information and the position information provided by the mobile station, and

a switching is made between the separate radio systems by informing the system detection information and the position information from the base station of the first radio communication system to the mobile station in the cell for communications by the base station of the first radio communication system.

3. A radio communication system, comprising: a base station of a first radio communication system; a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system, and operating asynchronous to the base station of the first radio communication system; and a mobile station capable of communications with both the first and second radio communication systems, wherein

the mobile station includes:

a radio section that receives a radio wave from each of the first and second radio communication systems; and

a system information estimation section that estimates system information of the second radio communication system, and outputs system estimation information,

the base station of the first radio communication system includes

a storage section that stores the system estimation information provided by the mobile station, and

a switching is made between separate radio communication systems by informing the system estimation information from the base station of the first radio communication system to the mobile station in the cell for communications by the base station of the first radio communication system.

4. The radio communication system according to claim 3, wherein

the mobile station includes

a position detection section that detects position information of the mobile station,

the base station of the first radio communication system includes

a storage section that stores the system estimation

information and the position information provided by the mobile station, and

a switching is made between the separate radio communication systems by informing the system estimation information and the position information from the base station of the first radio communication system to the mobile station in the cell for communications by the base station of the first radio communication system.

5. The radio communication system according to claim 2 or 4, wherein

the position detection section detects absolute position information.

6. The radio communication system according to claim 2 or 4, wherein

the position detection section detects relative position information from the base station.

7. A base station in a radio communication system, comprising: a first base station of a first radio communication system; a second base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the first base station, and operating asynchronous to the first base station; and a mobile station capable of communications with both the first and second radio communication systems, wherein

the first base station includes:

an other system reception section that receives a radio wave from the second base station;

a system information estimation section that estimates system information of the second radio communication system from an output of the other system reception section; and

a storage section that stores system estimation information being an output of the system information estimation section, and

a switching is made between separate radio communication systems by informing the system estimation information of the second base station from the first base station to the mobile station in communications with the first base station.

8. A mobile station capable of communications with both a base station of a first radio communication system, and a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system, and operating asynchronous to the base station of the first radio communication system, comprising:

a radio section that receives a radio wave from each of the first and second radio communication systems; and

a system information detection section that detects system information of the second radio communication system, and outputs system detection information, wherein

for communications with the base station of the first radio communication system, a switching is made between separate radio communication systems by informing the system detection information to the base station of the first radio communication system.

9. The mobile station according to claim 8, comprising a position detection section that detects position information of the mobile station, wherein

for communications with the base station of the first radio communication system, a switching is made between the separate radio communication systems by informing the system detection information and the position information to the base station of the first radio communication system.

10. The mobile station according to claim 9, wherein the position detection section detects absolute position information.

11. The mobile station according claim 9, wherein the position detection section detects relative position information from the base station.

12. A mobile station capable of communications with both a base station of a first radio communication system,

and a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system, and operating asynchronous to the base station of the first radio communication system, comprising:

a radio section that receives a radio wave from each of the first and second radio communication systems;

a system information detection section that detects system information of the second radio communication system, and outputs system detection information; and

a storage section that stores the system detection information output from the system information detection section, wherein

a switching is made between separate radio communication systems by storing the system detection information in the storage section when no communications are going on with the base station of the first radio communication system, and by informing the system detection information stored in the storage section to the base station of the first radio communication system when communications are through with the base station of the second radio communication system.

13. The mobile station according to claim 12, comprising a position detection section that detects

position information of the mobile station, wherein

a switching is made between the separate radio communication systems by storing the system detection information in the storage section when no communications are going on with the base station of the first radio communication system, and by informing the system detection information and the position information stored in the storage section to the base station of the first radio communication system when communications are through with the base station of the second radio communication system.

14. The mobile station according to claim 13, wherein

the position detection section detects absolute position information.

15. The mobile station according to claim 13, wherein

the position detection section detects relative position information from the base station.

16. A mobile station capable of communications with both a base station of a first radio communication system, and a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system, and operating asynchronous

to the base station of the first radio communication system,
comprising:

a radio section that receives a radio wave from each
of the first and second radio communication systems; and

a system information estimation section that
estimates system information of the second radio
communication system, and outputs system estimation
information, wherein

for communications with the base station of the first
radio communication system, a switching is made between
separate radio communication systems by informing the
system estimation information to the base station of the
first radio communication system.

17. The mobile station according to claim 16,
comprising a position detection section that detects
position information of the mobile station, wherein

for communications with the base station of the first
radio communication system, a switching is made between
the separate radio communication systems by informing
the system estimation information and the position
information to the base station of the first radio
communication system.

18. The mobile station according to claim 17,
wherein

the position detection section detects absolute

position information.

19. The mobile station according to claim 17, wherein

the position detection section detects relative position information from the base station.

20. A mobile station capable of communications with both a base station of a first radio communication system, and a base station of a second radio communication system including a cell being in close proximity to or overlapping a cell for communications by the base station of the first radio communication system, and operating asynchronous to the base station of the first radio communication system, comprising

a radio section that receives a radio wave from each of the first and second radio communication systems;

a system information estimation section that estimates system information of the second radio communication system, and outputs system estimation information; and

a storage section that stores the system estimation information output from the system information estimation section, wherein

a switching is made between separate radio communication systems by storing the system estimation information in the storage section when no communications

are going on with the base station of the first radio communication system, and by informing the system estimation information stored in the storage section to the base station of the first radio communication system when communications are through with the base station of the second radio communication system.

21. The mobile station according to claim 20, comprising a position detection section that detects position information of the mobile station, wherein

a switching is made between the separate radio communication systems by storing the system detection information in the storage section when no communications are going on with the base station of the first radio communication system, and by informing the system estimation information and the position information stored in the storage section to the base station of the first radio communication system when communications are through with the base station of the second radio communication system.

22. The mobile station according to claim 21, wherein

the position detection section detects absolute position information.

23. The mobile station according to claim 21, wherein

the position detection section detects relative position information from the base station.